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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,686	10/01/2001	Michael Austin	S63.2-10142	1843
490	7590	04/22/2004	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			JIMENEZ, MARC QUEMUEL	
		ART UNIT	PAPER NUMBER	
		3726	24	
DATE MAILED: 04/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/966,686	AUSTIN, MICHAEL
	Examiner	Art Unit
	Marc Jimenez	3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 30 January 2004.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 46-80 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) 63-71 is/are allowed.

6) Claim(s) 46,47,50-56,58-62,72,73 and 76-79 is/are rejected.

7) Claim(s) 48,49,57,74,75 and 80 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 46, 47, 50-56, 59-62, 72, 73, and 76-79** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pinchasik (6,364,870) in view of Tuberman (3,695,087).

Pinchasik teaches a method of reducing a stent 4 in cross-section comprising the steps of: providing a crimper (for example, fig. 12-15) having a plurality of closely spaced movable dies 29-32 defining an aperture 15, the dies 29-32 arranged to form an iris, the iris having an aperture 15 which is reducible in size by moving the dies 29-32, the aperture 15 having a center, each of the dies 29-32 having a longitudinal axis (the “longitudinal axis” of the dies 29-32 is considered the imaginary line that goes from the edges which are at the furthest distance from each other of the dies 29-32 looking at fig. 15 see attached copy of fig. 5) which is tangent to the aperture 15, placing a stent 4 disposed about a catheter 2 within the aperture 15 crimping the stent 4 onto the catheter 2 by reducing the size of the aperture 15.

Pinchasik teaches the invention cited with the exception of moving the dies simultaneously with one another.

Tuberman teaches a plurality of closely spaced movable dies **27** defining an aperture which are moved simultaneously with one another.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Pinchasik with dies that can be moved simultaneously with one another, in light of the teachings of Tuberman, in order to symmetrically crimp the stent.

Regarding claims 47, 56, 62, 73, and 79, Pinchasik teaches the stent **4** is disposed about a medical balloon, the medical balloon disposed about a catheter **2** (abstract, lines 1-2).

Regarding claims 50, 59, and 76, Pinchasik teaches the dies **29-32** are wedge shaped (see edges near numerals **10'** and **68** in fig. 15). Tuberman also teaches wedge shaped dies **27**.

Regarding claim 53, Pinchasik teaches the dies **29-32** are moved cooperatively inward during the moving step.

Regarding claim 54, Pinchasik teaches the entirety of the stent **4** is disposed in the aperture **15** during the placing step.

Regarding claims 51 and 60, Tuberman teaches that it is known to provide an embodiment with at least 8 dies (fig. 26).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to replace the dies of Pinchasik with the die arrangement taught by Tuberman, in order to provide a more symmetrical and rounded crimp.

Regarding claims 52, 61, and 77, at the time of the invention, it would have been an obvious matter of design choice to a person of ordinary skill in the art, to have used at least 16 dies because applicant has not disclosed that using at least 16 dies provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore,

would have expected applicant's invention to perform equally well with either the at least 8 dies taught by Tuberman (or as claimed in claim 51) or the claimed at least 16 dies because either number of dies perform the same function of crimping equally well.

Regarding claims 55 and 72, Tuberman teaches dies **26** that have an inward facing straight side which faces the aperture (fig. 26), the dies constructed and arranged such that any radial line extending from the center of the aperture to outside the crimper will encounter a movable die (compare fig. 26 of Tuberman with fig. 2b of applicant's drawings).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Pinchasik with dies that have an inward facing straight side which faces the aperture, the dies constructed and arranged such that any radial line extending from the center of the aperture to outside the crimper will encounter a movable die, in light of the teachings of Tuberman, in order to provide a more symmetrical and rounded crimp.

3. **Claim 58** is rejected under 35 U.S.C. 103(a) as being unpatentable over Pinchasik in view of Tuberman as applied to claim 55 above, and further in view of Myers et al. (5,700,285).

Pinchasik/Tuberman teach the invention cited with the exception of using nitinol stents.

Myers et al. teach that it is known to use nitinol stents (col. 4, line 51).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Pinchasik/Tuberman, with nitinol stents, in light of the teachings of Myers et al., in order to provide a stent material that has good strength and corrosion resistant properties.

*Allowable Subject Matter*

4. **Claims 63-71** are allowed.
5. **Claims 48, 49, 57, 74, 75, and 80** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

6. Applicant's arguments with respect to claims 46-80 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Interviews After Final***

8. Applicant note that an interview after a final rejection will not be granted unless the intended purpose and content of the interview is presented briefly, in writing (the agenda of the interview must be in writing) to clarify issues for appeal requiring only nominal further consideration. Interviews merely to restate arguments of record or to discuss new limitations will be denied. See MPEP 714.13 and 713.09.

***Contact Information***

9. Telephone inquiries regarding the status of applications or other general questions, by persons entitled to the information, should be directed to the group clerical personnel. In as much as the official records and applications are located in the clerical section of the examining groups, the clerical personnel can readily provide status information. M.P.E.P. 203.08. The Group clerical receptionist number is (703) 308-1148.

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers or other general questions should be directed to Tech Center 3700 Customer Service at (703) 306-5648, or fax (703) 872-9301 or by email to [CustomerService3700@uspto.gov](mailto:CustomerService3700@uspto.gov).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Jimenez whose telephone number is **703-306-5965**. The

examiner can normally be reached on **Monday-Friday, between 5:30 am- 2:00 pm.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Other helpful telephone numbers are listed for applicant's benefit.

Allowed Files & Publication	(703) 308-6789 or (888) 786-0101
Assignment Branch	(703) 308-9723
Certificates of Correction	(703) 305-8309
Drawing Corrections/Draftsman	(703) 305-8404/8335
Petitions/Special Programs	(703) 305-9285
Terminal Disclaimers	(703) 305-8408
PCT Help Desk	(703) 305-3257

If the information desired is not provided above, or a number has been changed, please call the general information help line below.

Information Help line	1-800-786-9199
Internet PTO-Home Page	<a href="http://www.uspto.gov/">http://www.uspto.gov/</a>

MJ *MJ*  
April 15, 2004

*JK*  
*Apr 3726*